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EXAMINER

MATTIS, JASON E

ART UNIT

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NOTIFICATION DATE

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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/033,141	Applicant(s) LEUNG, NIKOLAI K.N.	
	Examiner JASON E. MATTIS	Art Unit 2461	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-11 is/are allowed.
- 6) ☐ Claim(s) 1-3 and 12-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to the Request for Continued Examination filed 10/13/10. Due to the claim amendments, the previous rejections under 35 U.S.C. 112 second paragraph have been withdrawn. Claims 1-51 are currently pending in the application.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 3 and 4 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The preamble of Claim 3 is directed towards a "method of transmitting a communication signal on a carrier wave". The rest of the claim is directed towards the "signal comprising... ". Thus, the method is comprised entirely of the description of a signal. Signals, per se, are not considered to fall under one of the acceptable statutory categories of invention. It is recommended that claim 3 be amended such that it is not solely towards the composition of a signal.

Claim 4 is rejected for the same reasons as claim 3, as mentioned above.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 12-16, 18-20, 22-27, 29-36, 39-44, and 46-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gagnon et al. (European Patent Application EP 1 024 661 A2) in view of Paulraj et al. (U.S. Patent 6,067,290).

With respect to claim 1, Gagnon et al. discloses a wireless communication system supporting a broadcast service **(See page 7 paragraphs 29-30 and Figure 1 of Gagnon et al. for reference to a satellite communication system supporting broadcasting)**. Gagnon et al. also discloses transmitting a broadcast session on a broadcast transmission channel that is a physical channel **(See page 7 paragraph 31 and Figure 1 of Gagnon et al. for reference to broadcasting a broadcast session from a transmission station 102 to a receiver station 106 via a satellite/relay 104, which inherently must use a physical wireless channel to transmit the data)**. Gagnon et al. further discloses transmitting broadcast overhead information for the broadcast session with the broadcast session **(See page 8 paragraph 36 of Gagnon et al. for reference to including session description protocol plus (SDP+) records, which provide information about the broadcast sessions, in the broadcast**

sessions). Gagnon et al. also discloses that the broadcast overhead information provides information to a receiver for processing the broadcast session **(See page 16 paragraph 84 of Gagnon et al. for reference to SDP+ records containing a combination of SDP fields and augmentations including a protocol version field, the owner/creator and session identifier, the name of the session, a brief description of the session, the multicast address on which the session is being broadcast, the start and end times of the broadcast, the repeat times of the broadcast, the port of the broadcast, the type of broadcast (e.g., BFD, Stream, Webcast, or Intericast), sorting information and filtering information, which are all types of information used to process the broadcast session by the receiver station 106)**. Gagnon et al. further discloses the broadcast overhead information including physical layer formatting information for decoding the physical channel carrying the broadcast session **(See page 16 paragraphs 84-87 and page 17 paragraph 90 of Gagnon et al. for reference to the SDP+ records including information including a description of the broadcast content including a protocol version, which is formatting information for decoding the physical channel carrying the broadcast session)**. Gagnon et al. does not specifically disclose the broadcast overhead information being transmitted in-band with the broadcast session. Gagnon et al. also does not specifically disclose the physical layer formatting information included a Walsh code for decoding the physical channel.

With respect to claim 12, Gagnon et al. discloses a method for indicating broadcast session protocol **(See page 16 paragraph 84 of Gagnon et al. for**

reference to using SDP+ records to indicate a broadcast session protocol).

Gagnon et al. also discloses multiplexing information identifying a broadcast session protocol with a content of the broadcast session to provide a broadcast stream **(See page 8 paragraph 36 for reference to multiplexing SDP+ records with a broadcast session to provide a broadcast stream)**. Gagnon et al. further discloses transmitting the broadcast stream on a broadcast transmission channel that is a physical channel **(See page 7 paragraph 31 of Gagnon et al. for reference to broadcasting a broadcast session from a transmission station 102 to a receiver station 106 via a satellite/relay 104 that inherently must use a physical channel)**. Gagnon et al. also discloses that the information identifying the broadcast session protocol provides information to a receiver for processing the broadcast session **(See page 16 paragraph 84 of Gagnon et al. for reference to SDP+ records containing a combination of SDP fields and augmentations including a protocol version field, the owner/creator and session identifier, the name of the session, a brief description of the session, the multicast address on which the session is being broadcast, the start and end times of the broadcast, the repeat times of the broadcast, the port of the broadcast, the type of broadcast (e.g., BFDP, Stream, Webcast, or Intericast), sorting information and filtering information, which are all types of information used to process the broadcast session by the receiver station 106)**. Gagnon et al. further discloses the information including physical layer formatting information for decoding the physical channel carrying the broadcast session **(See page 16 paragraphs 84-87 and page 17 paragraph 90 of Gagnon et al. for reference to**

the SDP+ records including information including a description of the broadcast content including a protocol version, which is formatting information for decoding the physical channel carrying the broadcast session). Gagnon et al. does not specifically disclose the information identifying the broadcast session being transmitted in-band with the broadcast session. Gagnon et al. also does not specifically disclose the physical layer formatting information included a Walsh code for decoding the physical channel.

With respect to claim 19, Gagnon et al. discloses a method indicating broadcast session protocol **(See page 16 paragraph 84 of Gagnon et al. for reference to using SDP+ records to indicate a broadcast session protocol).** Gagnon et al. also discloses receiving a broadcast stream **(See page 7 paragraph 31 and Figure 1 of Gagnon et al. for reference to receiver station 106 receiving a broadcast stream).** Gagnon et al. further discloses determining information in the broadcast stream identifying a broadcast session protocol in accordance with the received broadcast stream **(See page 8 paragraph 36 and page 16 paragraph 84 of Gagnon et al. for reference to determining SDP+ records, which are records that identify a broadcast session protocol and that are sent with the broadcast stream and for reference to SDP+ records containing a combination of SDP fields and augmentations including a protocol version field, the owner/creator and session identifier, the name of the session, a brief description of the session, the multicast address on which the session is being broadcast, the start and end times of the broadcast, the repeat times of the broadcast, the port of the**

broadcast, the type of broadcast (e.g., BFD, Stream, Webcast, or Intericast), sorting information and filtering information, which are all types of information used to process the broadcast session by the receiver station 106). Gagnon et al. also discloses the information including physical layer formatting information for decoding a physical channel carrying the broadcast session wherein the physical layer formatting information includes a broadcast session protocol in accordance with the received broadcast stream **(See page 16 paragraphs 84-87 and page 17 paragraph 90 of Gagnon et al. for reference to the SDP+ records including information including a description of the broadcast content including a protocol version, which is broadcast session protocol formatting information for decoding the physical channel carrying the broadcast session).** Gagnon et al. further discloses processing the broadcast stream in accordance with the determined information if the receiving station contains the broadcast session protocol **(See page 8 paragraph 36 and page 16 paragraph 84 of Gagnon et al. for reference to processing the broadcast session using information in the SDP+ records at the receiving station).** Gagnon et al. does not specifically disclose the information in the broadcast stream being transmitted in-band with the broadcast session. Gagnon et al. also does not specifically disclose the physical layer formatting information included a Walsh code for decoding the physical channel.

With respect to claim 23, Gagnon et al. discloses a method indicating broadcast session protocol **(See page 16 paragraph 84 of Gagnon et al. for reference to using SDP+ records to indicate a broadcast session protocol).**

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Gagnon et al. also discloses multiplexing information identifying a broadcast session protocol with a content of the broadcast session to provide a broadcast stream (**See page 8 paragraph 36 for reference to multiplexing SDP+ records with a broadcast session to provide a broadcast stream**). Gagnon et al. further discloses providing the broadcast stream for transmission (**See page 7 paragraph 31 of Gagnon et al. for reference to broadcasting a broadcast session from a transmission station 102 to a receiver station 106 via a satellite/relay 104**). Gagnon et al. also discloses that the information identifying the broadcast session protocol provides information to a receiver for processing the broadcast session (**See page 16 paragraph 84 of Gagnon et al. for reference to SDP+ records containing a combination of SDP fields and augmentations including a protocol version field, the owner/creator and session identifier, the name of the session, a brief description of the session, the multicast address on which the session is being broadcast, the start and end times of the broadcast, the repeat times of the broadcast, the port of the broadcast, the type of broadcast (e.g., BFD, Stream, Webcast, or Intericast), sorting information and filtering information, which are all types of information used to process the broadcast session by the receiver station 106**). Gagnon et al. further discloses the information including physical layer formatting information for decoding a physical channel carrying the broadcast session (**See page 16 paragraphs 84-87 and page 17 paragraph 90 of Gagnon et al. for reference to the SDP+ records including information including a description of the broadcast content including a protocol version, which is formatting information for decoding the**

physical channel carrying the broadcast session). Gagnon et al. does not specifically disclose the information identifying the broadcast session protocol being transmitted in-band with the broadcast session. Gagnon et al. also does not specifically disclose the physical layer formatting information included a Walsh code for decoding the physical channel.

With respect to claim 34, Gagnon et al. discloses a method indicating broadcast session protocol **(See page 16 paragraph 84 of Gagnon et al. for reference to using SDP+ records to indicate a broadcast session protocol).** Gagnon et al. also discloses receiving a broadcast stream **(See page 7 paragraph 31 and Figure 1 of Gagnon et al. for reference to receiver station 106 receiving a broadcast stream).** Gagnon et al. further discloses determining an information element in the broadcast stream **(See page 8 paragraph 36 of Gagnon et al. for reference to determining SDP+ records, which are information elements that identify a broadcast session protocol and that are sent with the broadcast stream).** Gagnon et al. also discloses processing the broadcast stream in accordance with the determined information element **(See page 8 paragraph 36 and page 16 paragraph 84 of Gagnon et al. stream for reference to SDP+ records containing a combination of SDP fields and augmentations including a protocol version field, the owner/creator and session identifier, the name of the session, a brief description of the session, the multicast address on which the session is being broadcast, the start and end times of the broadcast, the repeat times of the broadcast, the port of the broadcast, the type of broadcast (e.g., BFD, Stream,**

Webcast, or Intericast), sorting information and filtering information, which are all types of information used to process the broadcast session by the receiver station 106). Gagnon et al. further discloses the information including physical layer formatting information for decoding a physical channel carrying the broadcast session portion **(See page 16 paragraphs 84-87 and page 17 paragraph 90 of Gagnon et al. for reference to the SDP+ records including information including a description of the broadcast content including a protocol version, which is formatting information for decoding the physical channel carrying the broadcast session).** Gagnon et al. does not specifically disclose the information element being transmitted in-band with the broadcast session. Gagnon et al. also does not specifically disclose the physical layer formatting information included a Walsh code for decoding the physical channel.

With respect to claim 39, Gagnon et al. discloses a method for indicating broadcast session protocol **(See page 16 paragraph 84 of Gagnon et al. for reference to using SDP+ records to indicate a broadcast session protocol).** Gagnon et al. also discloses multiplexing an information for a receiver for processing broadcast session with a content of the broadcast session to provide a broadcast stream **(See page 8 paragraph 36 for reference to multiplexing SDP+ records with a broadcast session to provide a broadcast stream and for reference to SDP+ records containing a combination of SDP fields and augmentations including a protocol version field, the owner/creator and session identifier, the name of the session, a brief description of the session, the multicast address on which the**

session is being broadcast, the start and end times of the broadcast, the repeat times of the broadcast, the port of the broadcast, the type of broadcast (e.g., BFDP, Stream, Webcast, or Intericast), sorting information and filtering information, which are all types of information used to process the broadcast session by the receiver station 106). Gagnon et al. further discloses the information including physical layer formatting information for decoding a physical channel carrying the broadcast session portion **(See page 16 paragraphs 84-87 and page 17 paragraph 90 of Gagnon et al. for reference to the SDP+ records including information including a description of the broadcast content including a protocol version, which is formatting information for decoding the physical channel carrying the broadcast session).** Gagnon et al. also discloses transmitting the broadcast stream on a broadcast transmission channel that is the physical channel **(See page 7 paragraph 31 of Gagnon et al. for reference to broadcasting a broadcast session from a transmission station 102 to a receiver station 106 via a satellite/relay 104 that inherently must use a physical channel for the session).** Gagnon et al. does not specifically disclose the information being transmitted in-band with the broadcast session. Gagnon et al. also does not specifically disclose the physical layer formatting information included a Walsh code for decoding the physical channel.

With respect to claim 47, Gagnon et al. discloses a method indicating broadcast session protocol **(See page 16 paragraph 84 of Gagnon et al. for reference to using SDP+ records to indicate a broadcast session protocol).**

Gagnon et al. also discloses receiving a broadcast stream (**See page 7 paragraph 31 and Figure 1 of Gagnon et al. for reference to receiver station 106 receiving a broadcast stream**). Gagnon et al. further discloses determining information to a receiver in the broadcast stream for processing a broadcast session in accordance with the received broadcast stream (**See page 8 paragraph 36 and page 16 paragraph 84 of Gagnon et al. for reference to determining SDP+ records, which are records that identify a broadcast session protocol for broadcast session processing and that are sent with the broadcast stream and for reference to SDP+ records containing a combination of SDP fields and augmentations including a protocol version field, the owner/creator and session identifier, the name of the session, a brief description of the session, the multicast address on which the session is being broadcast, the start and end times of the broadcast, the repeat times of the broadcast, the port of the broadcast, the type of broadcast (e.g., BFDP, Stream, Webcast, or Intericast), sorting information and filtering information, which are all types of information used to process the broadcast session by the receiver station 106**). Gagnon et al. also discloses the broadcast overhead information including physical layer formatting information for decoding a physical channel carrying the broadcast session portion (**See page 16 paragraphs 84-87 and page 17 paragraph 90 of Gagnon et al. for reference to the SDP+ records including information including a description of the broadcast content including a protocol version, which is formatting information for decoding the physical channel carrying the broadcast session**). Gagnon et al. further discloses processing the

broadcast stream in accordance with the determined information (**See page 8 paragraph 36, page 16 paragraph 84, and page 17 paragraph 90 of Gagnon et al. for reference to processing the broadcast session using information in the SDP+ records at the receiving station**). Gagnon et al. does not specifically disclose the information being transmitted in-band with the broadcast session. Gagnon et al. also does not specifically disclose the physical layer formatting information included a Walsh code for decoding the physical channel.

With respect to claims 1, 12, 19, 23, 34, 39, and 47, Paulraj et al., in the field of communications discloses transmitting broadcast overhead information in-band with a broadcast stream (**See the abstract, column 1 lines 23-50, and column 12 line 52 to column 13 line 46 of Paulraj et al. for to transmitting broadcast sessions that include in band control signals used by a receiver to properly decode the broadcast sessions**). Paulraj et al. also discloses the broadcast overhead information including a Walsh code for decoding a physical channel (**See column 15 line 15 to column 16 line 7 of Paulraj et al. for reference to inserting a Walsh code into broadcast transmission, wherein the Walsh code is used by a receiver for physical channel training**). Transmitting broadcast overhead information in-band with a broadcast stream has the advantage of creating more efficient bandwidth usage since no bandwidth channels need to be assigned to exclusively include broadcast control information.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Paulraj et al., to combine transmitting

broadcast overhead information in-band with a broadcast stream, as disclosed by Paulraj et al., with the system and method of Gagnon et al., with the motivation being to create more efficient bandwidth usage.

With respect to claim 2, Gagnon et al. discloses that the broadcast overhead information is a SDP message containing information for processing the session **(See page 8 paragraph 36 for reference to the overhead being an SDP+ record)**.

Gagnon et al. also discloses that the SDP message is interleaved with broadcast content **(See page 8 paragraph 36 for reference to the SDP+ records being broadcast on the broadcast channel with the broadcast data meaning they are interleaved with the broadcast content)**.

With respect to claims 13, 24, and 41, Gagnon et al. discloses multiplexing the broadcast session protocol with the broadcast session at the content server **(See page 7 paragraph 31 and Figure 1 of Gagnon et al. for reference to multiplexing broadcast data and control data at the transmitter station 102, which is the content server)**.

With respect to claims 14, 25, and 42, Gagnon et al. discloses multiplexing the broadcast session protocol with the content of the broadcast session periodically **(See page 8 paragraph 36 for reference to multiplexing SDP+ records periodically)**.

With respect to claims 15, 26, and 43, Gagnon et al. discloses periodically multiplexing with a frequency of multiplexing a short-term encryption key **(See page 12 paragraph 64 of Gagnon et al. for reference to multiplexing SDP+ records periodically at the same time as an encryption key)**.

With respect to claims 16, 27, and 44, Gagnon et al. discloses multiplexing to provide a broadcast stream in accordance with a bandwidth condition **(See page 7 paragraph 31 of Gagnon et al. for reference to multiplexing the data together, which must conform to a maximum allowed bandwidth allocated to each broadcast channel)**.

With respect to claims 18, 29, and 46, Gagnon et al. discloses multiplexing a broadcast session description identifier with a content of the broadcast session **(See page 15 paragraph 79 of Gagnon et al. for reference to multiplexing BARP information with the broadcast data with the BARP information indicating an IP address of a broadcast channel, which is an identifier of the broadcast session)**.

With respect to claim 20, Gagnon et al. discloses retrieving the broadcast session protocol from a storage media at the receiving station and processing the stream in accordance with the retrieved protocol **(See page 12 paragraph 61 of Gagnon et al. for reference to SDP+ data store 540 that is a database storing SDP+ record information for multiple broadcast sessions and for reference to using data retrieved from the data store to process broadcast sessions)**.

With respect to claim 22, Gagnon et al. discloses determining a broadcast session description identifier of a broadcast session **(See page 15 paragraph 79 of Gagnon et al. for reference to determining BARP information from broadcast sessions, with the BARP information indicating an IP address of a broadcast channel, which is an identifier of the broadcast session)**.

With respect to claim 30, Gagnon et al. discloses forming an information element comprising the broadcast session description identifier **(See page 15 paragraph 79 of Gagnon et al. for reference to using BARP information from broadcast sessions, with the BARP information indicating an IP address of a broadcast channel, which is an identifier of the broadcast session)**. Gagnon et al. also discloses multiplexing the information element with a content of the broadcast session **(See page 15 paragraph 79 of Gagnon et al. for reference to multiplexing BARP information with the broadcast data)**.

With respect to claim 31, Gagnon et al. discloses assigning each unit of the broadcast stream a sequence number **(See page 12 paragraph 64 of Gagnon et al. for reference to each packet including a continuity counter that is contains a sequence number)**.

With respect to claim 32, Gagnon et al. discloses delivering each of the units through a media not guaranteeing in-sequence deliver and re-ordering the delivered units in accordance with sequence number **(See page 12 paragraph 64 of Gagnon et al. for reference to using a continuity counter in each packet to re-order packets in the correct order at the receiver when packets are received out of sequence)**.

With respect to claim 33, Gagnon et al. discloses establishing a generic routing encapsulation tunnel through a media not guaranteeing in-sequence delivery **(See page 12 paragraph 64 of Gagnon et al. for reference to using a continuity counter in each packet to re-order packets in the correct order at the receiver when packets are received out of sequence through the air/satellite transmission medium)**.

With respect to claim 35, Gagnon et al. discloses determining a broadcast session protocol and processing the broadcast session in accordance with the broadcast session protocol **(See page 8 paragraph 36 and page 16 paragraph 84 of Gagnon et al. for reference to a broadcast signal including SDP+ records and for reference to the SDP+ records being used to process the broadcast session)**.

With respect to claim 36, Gagnon et al. discloses determining a broadcast session description identifier **(See page 15 paragraph 79 of Gagnon et al. for reference to determining BARP information with the BARP information indicating an IP address of a broadcast channel, which is an identifier of the broadcast session)**. Gagnon et al. also discloses processing the stream in accordance with a broadcast session protocol corresponding to the identifier **(See page 16 paragraphs 83-88 of Gagnon et al. for reference to processing a stream using an SDP+ record containing a protocol that is indexed by IP address of the broadcast channel)**.

With respect to claim 40, Gagnon et al. discloses multiplexing a broadcast session protocol with broadcast content both before and after a protocol change **(See page 8 paragraph 36 of Gagnon et al. for reference to multiplexing SDP+ records periodically, meaning that the records are included both before and after any protocol change)**.

With respect to claim 48, Gagnon et al. discloses processing the broadcast session in accordance with the determined information **(See page 8 paragraph 36 and page 16 paragraph 84 of Gagnon et al. for reference to a broadcast signal**

including SDP+ records containing broadcast protocol information and for reference to the SDP+ records being used to process the broadcast session).

With respect to claim 49, Gagnon et al. discloses processing the broadcast session in accordance with the determined information if the receiving station contains the protocol **(See page 8 paragraph 36, page 12 paragraph 61, and page 16 paragraph 84 of Gagnon et al. for reference to a broadcast signal including SDP+ records containing broadcast protocol information and for reference to the SDP+ records being stored in a data store at the receiver station and used to process the broadcast session).**

With respect to claim 50, Gagnon et al. discloses retrieving the broadcast session protocol from a storage media at the receiving station and processing the stream in accordance with the retrieved protocol **(See page 12 paragraph 61 of Gagnon et al. for reference to SDP+ data store 540 that is a database storing SDP+ record information for multiple broadcast sessions and for reference to using data retrieved from the data store to process broadcast sessions).**

5. Claims 17, 28, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gagnon et al. in view of Paulraj et al. and in further view of Rustad et al. (U.S. Pat. 6775303).

With respect to claims 17, 28, and 45, the combination of Gagnon et al. and Paulraj et al. does not disclose multiplexing a broadcast session protocol with a content of the broadcast session when the broadcast content bandwidth is low.

With respect to claims 17, 28, and 45, Rustad et al., discloses embedding control signaling with content data when the bandwidth requirement of the content data is low (**See column 4 line 66 to column 5 line 7 of Rustad et al. for reference to this process**). Embedding control signaling with content data when the bandwidth requirement of the content data is low has the advantage of more efficiently using the complete bandwidth of a communication channel.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Gagnon et al., to combine embedding control signaling with content data when the bandwidth requirement of the content data is low, as suggested by Rustad et al., with the system and method of Gagnon et al. and Paulraj et al., with the motivation being to more efficiently use the complete bandwidth of a communication channel.

6. Claims 21, 37-38, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gagnon et al. in view of Paulraj et al. and in further view of Matsui et al. (U.S. Pat. 6580756).

With respect to claims 21, 37, and 51, the combination of Gagnon et al. and Paulraj et al. does not disclose requesting SDP information when the SDP information is not available at the receiving station.

With respect to claims 21, 37, and 51, Matsui et al., in the field of communications, discloses requesting SDP information when the SDP information is not available at the receiving station (**See column 13 lines 36-45 of Matsui et al. for**

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reference to a receiver requesting for SDP information to be sent from a server).

Requesting SDP information when the SDP information is not available at the receiving station has the advantage of allowing a receiver station to actively request SDP information when the receiver station needs the SDP information to process a data stream.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Matsui et al., to combine requesting SDP information when the SDP information is not available at the receiving station, as suggested by Matsui et al., with the system and method of Gagnon et al. and Paulraj et al. , with the motivation being to allow a receiver station to actively request SDP information when the receiver station needs the SDP information to process a data stream.

With respect to claim 38, Gagnon et al. discloses retrieving the broadcast session protocol from a storage media **(See page 12 paragraph 61 of Gagnon et al. for reference to SDP+ data store 540 that is a database storing SDP+ record information for multiple broadcast sessions including broadcast protocol information).**

Allowable Subject Matter

7. Claims 5-11 are allowed.

8. The following is a statement of reasons for the indication of allowable subject matter: Claims 5 and 7 are allowable since the prior art of record fails to disclose or render obvious a broadcast session including an in-band SDP message comprising physical layer formatting information including a Walsh code for decoding a physical channel. While the prior art of record does disclose transmitting SDP messages with broadcast sessions (See Gagnon et al.) and transmitting broadcast overhead information, including a Walsh code, in-band with a broadcast session (See Paulraj et al.), the prior art of record does not disclose an SDP message including a Walsh code for decoding a physical channel.

Response to Arguments

9. Applicant's arguments filed 10/13/10 have been fully considered but they are not persuasive.

Regarding Applicant's argument that the SDP+ records of Gagnon et al. do not include a protocol version of broadcast content, the Examiner respectfully disagrees. Applicant argues that the protocol version disclosed by Gagnon et al. is a protocol version of the SDP record itself and not of the broadcast content referred to by the SDP record. Gagnon et al. discloses the use of an enhanced version of SDP called SDP+. The SDP+ records include all the same information as the SDP records. SDP records are known to include a description of a session including a description of a type of media being presented by a session as well as a transport protocol used by the session

(See section 5.1 of RFC 2327 entitled “SDP: Session Description Protocol” for reference to SDP records including this information). Thus, it is clear that the SDP records disclosed by Gagnon et al. do include a protocol version of broadcast content and not just a protocol version of the SDP record itself. Therefore, Gagnon et al. does disclose broadcast overhead information (a SDP record) including physical layer formatting information (a transport protocol) for decoding a physical channel carrying a broadcast session (wherein the transport protocol indicated by the SDP record is used to decode the broadcast session corresponding to the SDP record), as claimed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON E. MATTIS whose telephone number is (571)272-3154. The examiner can normally be reached on M-F 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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